SUPPLEMENT
TO THE
British Medical Journal

LONDON: OCTOBER 4TH, 1890.

A WEEKLY EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(1) Infectiousness of Croupous Pneumonia.

DR. NIL J. SOKOLOFF (*Bolnitchnaia Gazeta Botkina*, No. 29, 1890, p. 713) publishes observations on the infectiousness of croupous pneumonia, based on 2,360 cases of the disease. The average mortality was 12 per cent. In 108 cases the pneumonia appeared as a complication of enteric fever, the mortality in this group being 65 per cent. At least 78 out of the 108 typhoid patients developed pneumonia in the hospital, after having been in the society of pneumonia cases for a day or more. Dr. Sokoloff concludes that there can be no doubt that croupous pneumonia is an infectious disease, which in hospitals is transmitted from patient to patient, much in the same way as erysipelas (that is, from neighbour to neighbour, etc.). Typhoid patients have a special tendency to catch the infection, and the mortality amongst those who suffer from this complication is enormous. Every hospital should, therefore, keep special wards for pneumonic cases; and on the appearance of pneumonia in typhoid patients, they should be at once isolated, and the infected ward thoroughly disinfected. Wards which have been occupied by pneumonic cases should only be used for other patients after the most careful disinfection. On the outbreak of an epidemic of croupous pneumonia, strict sanitary measures should be at once adopted throughout the town.

(2) Intestinal Antisepsis.

PROFESSOR CANTANI (*Deutsche med. Zeit.*, No. 43, 1890) states that treatment in disinfection of the intestine has two objects, the one to get rid of the micro-organisms, the other to eliminate their products—ptomaïnes. To accomplish these objects disinfectants may be given by the mouth or by the rectum. When given by the mouth it is doubtful whether the remedy ever reaches the intestine, since it is probably absorbed in the stomach, unless it is an insoluble or slowly soluble drug. Calomel has been given with this view, and is useful when the mischief is not great; in long-standing cases it is of no use. In typhoid fever large doses of charcoal (over 3 ounces daily) can be used with safety and benefit. Naphthalin, iodoform (up to 15 grains daily), and bismuth salicylate, have been utilised in this way. These remedies certainly have a beneficial effect on the contents of the intestine, but do not act upon the mucous membrane, as they are insoluble. Carbolic acid, mercuric chloride, and similar soluble drugs, although they are good antiseptics, cannot be used with advantage, owing to the small dose which is poisonous to man, and the readiness with which they are absorbed. Cantani considers that the best results are obtained by giving the antiseptics per anum. Large enemata pass the ileo-cæcal valve and enter the small intestine, and even the stomach. Cantani has several times observed oil in the vomit when enemata of an oil emulsion have been given. By the method of enemata all irritation of the stomach is avoided, the intestine is washed out, all poisonous substances (ptomaïnes, etc.), being removed. The vehicle used was oil or water, and the antiseptics or astringents were alum, salicylic acid preparations, thymol, aseptol, sulphocarbolate of zinc, boric acid, hydrochloric acid, sulphites, and hyposulphites. Cantani found tannic acid and carbolic acid the most useful remedies. Enemata of tannin, with 1 to 1½ litre of water, were useful in all cases of fermentation in the intestine, and might be used in dysentery mixed with gum and alternated with enemata of oil. Meteorism and diarrhœa are ameliorated in typhoid fever by tannin enemata. Carbolic acid enemata (10 to 50 per cent. (!) of the acid in 2 litres of cold water, with 15 grains of sulphate of quinine added) are useful in typhoid.

(3) Hereditary Ataxy and Atrophy of the Cerebellum.

MENZEL (*Arch. f. Psych.* Bd. xxii, H.1,S. 160) records the case of a man with a strong neurotic family history, who died at the age of 46. From the age of 6 years uncertainty of movement had slowly supervened, and at last he could not walk, write, or follow his occupation. The case was diagnosed as one of Friedreich's disease. At the necropsy it was found that there was most marked atrophy of the cerebellum. The microscope showed the following changes in the spinal cord: In the lumbar region atrophy of the cells of the anterior cornua and of the anterior roots, degeneration of the posterior columns and posterior roots; in the dorsal and cervical regions degeneration of Goll's, Burdach's, the pyramidal, and the cerebellar tracts. These degenerations extended up into the medulla.

(4) Obstinate Vomiting caused by Worms.

DR. GIACOMO ARRIGOSSI records (*Gazetta degli Ospitali*, September 21st) a case of obstinate vomiting due to irritation of the vagus by ascarides in the intestine. The patient was a woman, aged 35, who for some months had suffered from severe indigestion, with pain in the epigastric region, and vomiting after food. She had been treated by various physicians with antacids, pepsine, etc., but with little benefit; washing out the stomach was also tried, but did no good. The stomach was not dilated, and no tumour could be felt, but the pupil was "enormously" dilated without any obvious cause. Dr. Arrigossi, considering the symptom as a sign of reflex irritation of the

pneumogastric, sought for the cause in the digestive tract. After a dose of calomel, ascarides were found in the stools; santonin was then given with "splendid results." The vomiting and dyspeptic symptoms ceased, appetite returned, and the patient was completely cured.

SURGERY.

(5) A Case of Splenectomy.

DR. HOWARD FUSSELL, of Philadelphia, reports (*University Medical Magazine*, September, 1890) a case of splenectomy in a woman aged 50. She had suffered for about a year from a tired dragging feeling referred to the left groin, and after a full meal had been suddenly seized with severe abdominal pain, with vomiting and purging. A tumour was discovered lying in the left groin and occupying the greater part of the pelvis. An operation was decided on, but a delay of forty-eight hours occurred before it was carried out. Laparotomy was at length performed by Dr. C. Penrose, who found that the tumour was a displaced spleen, the pedicle of which was twisted. This had caused rupture of the organ. The pedicle was tied with silk, and the spleen removed. The abdominal cavity was washed out with hot water, dried, and the parietal wound stitched. A glass drainage tube was inserted. After doing fairly well for a time, the patient passed into a state of stupor on the evening of the first day, remaining so till 1 P.M. on the following day, when she asked for a drink. Almost immediately afterwards she was seized with a general clonic convulsion, and died. The spleen was four times its natural size, rather soft, and ruptured in the hilum. The pedicle was in good condition; there had been no bleeding, except a clot the size of a walnut in the sheath of the vessels above the ligature. The urine was not examined, owing to a misunderstanding, but the kidneys were apparently quite healthy. Dr. Fussell thinks the result would probably have been different if it had not been for the delay in operating. He gives a table of 105 cases of splenectomy for various conditions. The proportion of recoveries was 57 per cent.

(6) Surgical Treatment of Abscess of the Liver.

DR. JORGE LEZAETA RIVAS (*Revista Medica de Chile*, Nos. 11 and 12) discusses the surgical treatment of hepatic abscess in an elaborate article. Abscess of the liver causes 5 per cent. of the deaths among male patients in the Chili hospitals; the disease is most prevalent in the centre of the middle zone of the republic, and especially at Valparaiso, Santiago, Talca, and Concepcion. It is just in this part of the country that dysentery (which is the most common intestinal disease in Chili, and is responsible for from 10 to 11 per cent. of its hospital mortality) is most rife, and throughout the whole of the country the two diseases are found together, a circumstance which Dr. Rivas thinks tends to show that they stand to each other in the relation of cause and effect. The following is a summary of Dr. Rivas's conclusions as to treatment: When abscess of the liver is suspected, the organ should be examined by exploratory punctures carried out with the strictest antiseptic precautions. It is not necessary for this purpose that adhesions should exist. Aspiration should in all cases be the first step in surgical treatment, and as much pus as possible should always be drawn off. If aspiration fails, the abscess should at once be opened antiseptically with a large-sized straight bistoury without waiting for adhesions to form, the site of the abscess having first been ascertained by exploratory puncture. If the abscess is situated in the convex surface of the right lobe, both puncture and incision should be performed in the eighth or ninth intercostal space; if in the concave surface, a finger's breadth below the arch of the ribs. In both cases a point between the posterior axillary and the nipple lines should be selected. If the abscess is in the left lobe, it should be opened in the parasternal line 2 centimètres below the costal arch. The length of the incision should be from 3 to 12 centimètres according to circumstances. Injections of tincture of iodine or chloride of zinc (2 per cent.) are often useful, but the quantity of fluid injected should never exceed the quantity of pus drawn off. For mere washing out of the cavity, Dr. Rivas prefers 2½ per cent. solutions of carbolic acid, and 3 to 4 per cent. solutions of boric acid. The sheet anchors of the treatment by incision are free opening and scrupulous cleansing of the abscess cavity, which should be scraped if needful. For drainage Dr. Rivas uses Masson's siphon tubes. Abscesses which burst into the pleura, the lung, the intestine, etc., should be treated by antiseptic incision, a careful examination being made, if necessary, under chloroform. Dr. Rivas gives details of 27 cases treated according to these principles; 21 were cured, and 6 died.

(7) Hydatid Cyst of the Spleen.

DR. BRAINE (*Annales de la Policlinique de Paris*, September, 1890) relates a case of hydatid cyst of the spleen in which laparotomy was performed with a completely successful result. A man aged 34 noticed in 1884 a swelling in his left hypochondriac region, which increased slowly till, in July, 1887, it extended into the epigastric region, bulged out the false ribs, and extended upwards towards the nipple and downwards into the iliac fossa. It measured 20 centimètres in the vertical direction and 21 centimètres across. The surface of the tumour was smooth and uniform; fluctuation could be felt beneath the false ribs; deep percussion elicited slight hydatid fremitus. Pressure over the kidney caused no pain, and the urine was normal; the other abdominal and thoracic organs appeared to be healthy. The man was markedly anæmic, and had lost flesh considerably. The diagnosis of a cyst of the spleen was arrived at by exclusion. Simple aspiration was first tried, three litres and a few grammes of clear fluid being drawn off with Dieulafoy's apparatus. The patient improved for a time, but three months later the swelling was found to be larger than before. Laparotomy was accordingly performed on November 27th, 1887. The cyst was punctured, and 2 litres 50 grammes of sero-purulent fluid drawn off, after which the orifice of the puncture was closed with forceps. It having been found impossible, on account of deep adhesions, to draw the cyst completely out of the abdominal cavity, it was fixed by two points of silver suture to the angles of the skin incision, and laid open to an extent corresponding to the length of the wound. The wall of the cyst was then freely resected, and the edges of the opening stitched to the borders of the wound, eight carbolised silk sutures, including skin, muscle, peritoneum, and cyst wall, being used for each side. After clearing out a number of daughter cysts and a large quantity of membranous shreds with sponges, the cavity was washed out with 3 litres of boiled water; two drain tubes 26 centimètres in length were introduced, and the wound covered with iodoform gauze. Everything went well for some time, but on the sixth day there was unmistakable evidence of suppuration. This was found to be due to the presence of a secondary cyst as large as a fœtal head at full term which had lain hidden, flattened on itself, in the depths of the cyst. The cavity was then washed out with a 1 per cent. solution of carbolic acid, and shrinking took place

rapidly. Fifteen days after the operation, its capacity was reduced to 90 grammes, and the drain tubes were only 17 centimètres long; a fortnight later, the cavity held only 25 grammes of fluid. In January, 1888, the wound hardly admitted the tube; by the following May, the fistula had closed. Since that time the patient has been in perfect health, spending a good deal of time in gymnastic exercises, and doing 30 kilomètres on his bicycle every morning. The case, Dr. Braine points out, is of special interest, not only on account of the rarity of the affection, but also because the patient is known to remain well up to date, nearly three years after the operation.

MIDWIFERY AND DISEASES OF WOMEN.

(8) Non-abortive Hæmorrhage during Pregnancy.

DR. W. J. ROTHWELL (*Obstetric Gazette*, Cincinnati, August, 1890) shows from clinical and other evidence that hæmorrhage occasionally occurs during pregnancy without representing incipient abortion. Menstruation, a form of hæmorrhage, is not very infrequent in the early months of gestation. Erosion of the cervix gives rise to a loss of blood, which in pregnant women may simulate the beginning of abortion. Pregnant women who have suffered from endometritis previous to conception have slight hæmorrhages about the second month from pressure of the enlarging fœtus on the congested veins of the endometrium. Bleedings also take place in gravid women suffering from uterine fibroma, cancer or laceration of the cervix. Dr. Rothwell considers that absence of pains or dilatation of the external os characterises non-abortive hæmorrhages. In the discussion on this paper, which was read at a meeting of the Denver Obstetrical and Gynæcological Society, Dr. Pershing pointed out that absence of pain does not prove that hæmorrhage is not due to incipient abortion. An intelligent patient, who had repeated abortions at about the ninth week, assured him that they were all painless. Dr. Taylor and other speakers dwelt on the difficulty of making sure that hæmorrhage during pregnancy was non-abortive. Any case of bleeding under these circumstances should be treated as abortion. In the course of the same discussion it was further alleged that in the high altitudes of Colorado menstruation was apt to be more frequent and more profuse than at the sea level. Dr. Schollenberger described a case of menorrhagia regularly recurring during the first six months of pregnancy. Several Denver patients told him that it was rather difficult for them to calculate the end of pregnancy on account of these hæmorrhages.

(9) Quinine and Pregnancy.

MERZ (*Bulletin Méd. de l'Algérie*, January and February, 1890) concludes that, by setting up uterine contraction, quinine may cause abortion during the first three months of pregnancy. During the last three months that drug hardly ever provokes labour. The action of quinine during the middle months is uncertain; it certainly appears to grow less noxious as pregnancy advances. From the above conclusions it is evident that quinine ought to be avoided during early pregnancy, unless there be dangerous symptoms due to paludism.

(10) Management of Post-partum Hæmorrhage.

DR. DIRSKA (*Berlin. klin. Wochenschr.*, 1890, No. 8) extensively practises a method which he believes to be extremely efficacious in checking post-partum hæmorrhage. He first presses the fundus firmly with one hand; with the other hand he clears away all clots, and then slips into the uterus and upper part of the vagina two or three lumps of ice of the size of a walnut. The pieces of ice are left in place for a few minutes. The uterus is subjected to pressure for about a quarter of an hour longer. Dr. Diraka has always succeeded in checking the hæmorrhage at once and permanently by this method. He practised it in over thirty cases of central placenta prævia, and all were saved.

(11) Cystic Disease of Fœtal Kidney Impeding Labour.

DR. EHRHARDT has recently described a case of cystic disease of the fœtal kidney impeding labour (*Nouv. Arch d'Obst.*, August, 1890). A woman aged 23 was delivered at the eighth month of her second child. The fœtal heart sounds could be heard before labour; the abdomen of the mother was much distended. The head and the arms were delivered and found to be very œdematous. After prolonged traction the fœtus remained fixed. The maternal pelvis was normal. Distension of the child's abdomen was then detected by passing the hand into the uterus after decapitation and removal of one arm, and evisceration was attempted. The liver was removed; next a large friable tumour was drawn down; a few pieces were torn off, and then small cystic degeneration of one kidney was diagnosed. This drawing down of the kidney allowed the remains of the fœtus to be delivered by gentle traction on the thorax. Small cystic degeneration of both kidneys was discovered. The spermatic plexus was slightly varicose. It was remarkable that the fœtus lived till delivery, since both kidneys were entirely degenerate and the heart diseased. The case shows the insignificant part played by the kidneys during intrauterine life, and refutes the theory which attributes the origin of the liquor amnii to the urine of the fœtus. One of the kidneys was just over, the other just under, 5 inches in vertical measurement. The success of drawing down one of the tumours must be remembered as a precedent. It diminished the transverse diameter of the fœtal abdomen, which was the sole cause of impediment to delivery.

(12) New Operation for Prolapsus of the Anterior Vaginal Wall.

DR. ANDREW F. CURRIER (*Annals of Gynecology and Pediatry*, July, 1890) observes that prolapse of the anterior vaginal wall may exist alone, without descent of the bladder. It may occur in the young and nulliparous in connection with general relaxation of the muscular fibre. It may be the consequence of straining at stool in connection with persistent constipation, or it may occur in the aged through general atrophy of the muscular tissue. Without doubt it is most frequently related to parturition and the puerperium. The object of any operation for this condition is to restore the structure to its normal condition as a support and barrier. This implies that the wall must be shortened, that is contracted, in the long axis of the vagina, and likewise in its short or transverse axis. Previous operations, Dieffenbach's, Sims's, and Emmet's, only shorten the vaginal wall in one axis. A long scar, subject to marked tension, remains and is very liable to stretch, the patient's condition ultimately becoming worse than before operation. The theory of the operation devised by Dr. Currier is, that it contracts the vaginal wall to a sufficient extent both in length and breadth, and distributes the tension over two lines of union at right angles to each other. An elliptical piece of mucous membrane, with its long

diameter vertical, is dissected away from the anterior vaginal wall, commencing immediately below the cervix and ending a little above the urinary meatus. Another elliptical piece, made across the middle of the first area of dissection, is then cut away, its extremities lying at the lateral reflexions of the anterior wall. The cut edges are united by sutures, which should be buried in the connective tissue if possible; but that is inadvisable if there be much protrusion of the bladder. Dr. Currier claims good results.

---

(13) Extrauterine Pregnancy twice in the same Patient.

Dr. Leopold Meyer, of Copenhagen (*Annals of Gynecology and Pediatry*, July, 1890), describes a suspected case, under his care. The first operation was performed at about the twentieth week, four weeks after rupture; there was tubo-abdominal pregnancy of the left side, and the left tube and ovary were removed. The patient was discharged cured in January, 1888. She menstruated regularly, but hypogastric pains set in towards the end of summer. On September 6th, 1888, the pains came on after hard work; and on the next day, ten days before the period was due, she lost some very dark-coloured blood. The hæmorrhage stopped. On September 19th Dr. Meyer examined the case. On the abdominal end of the right tube, but inseparable from the ovary, a tender swelling of the size of a big walnut could be felt. Symptoms of collapse set in a few days later, with no distinct evidence of internal hæmorrhage. On October 25th severe symptoms set in after metrorrhagia; there was no doubt that bleeding was going on internally. The patient rallied, metrorrhagia continued, and on the night of October 28th she passed a membrane, which had all the characteristics of a true decidua of pregnancy. The hæmorrhage stopped on November 11th. On February 19th, 1889, only a small remnant of a big soft swelling, which was felt to the right and behind the uterus during the attack in October, could be detected. The patient was in good health when her case was published. The evidence that her second illness was of the same character as the first was strong. Dr. Meyer gives abstracts of nine similar cases (Lawson Tait, Kletzsch, Herman, Van Henkelom, Veit, Olshauser, and Bloch; three of the nine occurred in Veit's practice). Of these, only three were verified by abdominal section (one Olshausen, one Veit), or by *post-mortem* examination (Tait). The remaining six are open to doubt, as in Dr. Meyer's case.

---

(14) Influenza and the Functions of the Female Organs.

Dr. Mijnlieff, of Breukelen (*Nouvelles Archives d'Obstétrique et de Gynécologie*, August, 1890), publishes clinical evidence which supports the observations of Müller, of Munich. The latter physician, on the strength of statistics of fifty-one cases, found that influenza had a distinct influence on the female organs. The disease interrupted the course of gestation, and, in women not pregnant, it set up profuse menorrhagia, which lasted for many days and resisted the usual therapeutic measures. Dr. Planten, of Loonen, observed a case of hæmorrhage from the genitals in a child, aged 11, suffering from influenza. Dr. Mijnlieff describes six cases of influenza under his own care. A healthy girl, aged 14, had severe uterine hæmorrhage for five days, beginning the day after the symptoms of the epidemic appeared. Menstruation had never occurred. A chlorotic girl, aged 17, took the influenza. Menorrhagia set in on the next day and lasted for three days, greater in amount than on any previous occasion; indeed, the periods had hitherto been scanty. The same phenomenon was observed in a young woman aged 22. A woman, aged 38, mother of five children, was seized with influenza ten days after her period. On the third day menorrhagia, with severe lumbar and hypogastric pains, set in and lasted for a week. A healthy woman, in the second month of pregnancy, aborted on the second day after the appearance of the epidemic. A woman, aged 22, was attacked by influenza on the fifth day after delivery. Troublesome flooding occurred within a few hours. The flaccid bulky uterus was subjected to friction and subcutaneous injections of ergotine were given. The vagina was plugged with iodoform gauze. The remedies proved efficacious. Dr. Mijnlieff considers that there are two ways of interpreting this uterine hæmorrhage in influenza. It may represent an acute exanthematic endometritis, such as is seen in scarlatina, variola, and typhus. On the other hand, the germ, which enters through the respiratory or digestive tract, may cause vasomotor disturbance through reflex action, and so set up hæmorrhage in the uterus as well as in other organs.

DISEASES OF CHILDREN.

(15) The Cold Bath in Infantile Typhoid Fever.

M. Devic has communicated to the Société des Sciences Médicales de Lyon (*Lyon Médical*, 1890, p. 547) a memoir prepared in conjunction with M. Perret (*Prof Agrégé*) on the use of cold baths in the treatment of infantile typhoid fever, under which term were included cases ranging up to 14 years. The treatment was well borne by all the patients, and collapse was not observed in any case. The average number of baths was 50. The duration of each bath was generally ten minutes, and the temperature of the water 68° F. (20° C.). The water ought not to be cooler than this except in quite exceptional cases. The number of cases treated was 81; of this number 25 were slight and 14 severe; the number of deaths was 3; 2 deaths in children at the age of puberty (almost adults) were due to the intensity of the infection; the third, a very young child, succumbed to a rare complication—purulent pericarditis following suppurative broncho-pneumonia. The mortality was thus 3.7 per cent.

---

(16) Congenital Stenosis of the Duodenum.

Dr. J. H. Emerson has reported to the Section in Pediatrics, of the New York Academy of Medicine (*N. Y. Med. Jl.*, August 9th, 1890), a case of this rare condition in a male child who died four days and ten hours after birth. At the necropsy the stomach was found to be markedly dilated; the pyloric orifice was also dilated, and the duodenum distended to a point immediately above the orifice of the common bile duct, at which point the lumen of the duodenum terminated abruptly, owing to "a gathering together of all the tissues of the gut at that point, much as a bag is drawn together by a string." The child when born was well nourished; thirty-three hours after birth it suddenly spat up or regurgitated about half an ounce of rather dark blood mixed with mucus; this was repeated in four or five hours more, and again several times during the next nine hours. The child would not suck, but swallowed small quantities of milk and water; when about 3½ days old it again vomited, a large quantity of dark brown, watery, and grumous fluid being ejected partly through the nostrils; a similar discharge took place now and again, not always with an effort of vomiting, until his death. The bowels were moved several times, the first stool, passed before the vomit-

ing began, was tawny, but subsequent ones consisted only of meconium. The blood apparently came from the œsophagus, in which was found after death a large, firm, dark thrombus, 2.5 centimètres long, firmly attached to the posterior wall, immediately above the cardiac orifice; the mucous membrane beneath the thrombus was eroded. The exact nature of the process giving rise to the bleeding could not be made out. Fluid could not be forced from the stomach through the stenosed portion of the duodenum into the intestines, nor could air be forced in the upward direction.

(17) Congenital Diaphragmatic Hernia.

Dr. Herbert R. Spencer (*Obs. Soc. Trans. Lond.*, vol. xxxii, p. 132) reports three cases of congenital diaphragmatic hernia. In two the congenital deficiency was on the right side, and the liver, small intestine, cæcum, vermiform appendix, and part of the liver had passed into the chest. In a third case the diaphragm was entirely wanting on the left side. In this instance the small intestine, stomach, and great omentum, the spleen, and a part of the left lobe of the liver filled the left side of the chest. The causation of these abnormalities is not discussed.

(18) Diphtherial Paralysis of Respiratory Muscles.

In a paper published in the *American Journal of the Medical Sciences* (September, 1890), Dr. William Pasteur discusses the importance of respiratory paralysis after diphtheria as a cause of pulmonary complications, and makes certain suggestions as to treatment. Dr. Pasteur found that in thirty-four consecutive cases of diphtherial paralysis the muscles of ordinary respiration, especially the diaphragm, were more or less involved in thirteen. The more constant and obtrusive physical signs of this condition noted in the cases observed (fifteen in all) were: (1) increased movement of the lower ribs, one of the earliest and most constant physical signs associated with diaphragmatic failure; it appears to be due to a compensating over-action of the scaleni and intercostal muscles, intensified by the diminution or removal of the steadying action of the diaphragm on the lower ribs. The resulting expansion of the lower portion of the thoracic cage is all the more striking that during the same period the epigastrium is either passive or actually receding, a state of things the exact converse of that obtaining in the dyspnœa of broncho-pneumonia, to which these cases sometimes present a superficial resemblance; (2) altered abdominal movement best perceived by laying the hand lightly on the epigastrium; cessation of movement short of reversal is probably an indication of paresis of the diaphragm; (3) altered character of cough and voice; cough is at first simply weaker, but in severe cases eventually loses its explosive quality; concurrently the voice becomes progressively feebler. Paralysis of the diaphragm affects these and other expiratory acts (spitting, sneezing) by causing the preceding inspiration to be incomplete. Further, it is highly probable that weakness of the muscles which control the glottic aperture is an important factor in the alteration of voice and cough. The dyspnœa attacks observed after drinking are to be attributed in part to this cause, and in part to enfeeblement and inco-ordination of the muscles of deglutition. Dr. Pasteur arrives at the conclusion that paralysis of the diaphragm or other parts of the chest wall tends to induce loss of function in the subjacent lung, which is, *cæteris paribus*, proportionate to the degree of paralysis, and results in more or less collapse and œdema of the pulmonary tissue. He strongly recommends feeding through a tube; a soft red rubber catheter can be easily introduced through the nose, and he has found that children soon become reconciled to the operation. By the use of this method, the ineffectual and distressing cough is relieved, the quantity of food can be regulated exactly, and the leakage of food stuffs into the air passages is prevented. He believes that resort to artificial respiration is in many cases beneficial; if collapse, resulting primarily from physical inability to expand, be the morbid state of lung to be contended against, any rational treatment, he argues, must have for its object to assist expansion; he recommends that artificial respiration (Sylvester) should be commenced on the first appearance of any indication of paralysis of the diaphragm; it should be carried out by the nurse three or four times in the twenty-four hours, according to the severity of the symptoms, for a period of ten or fifteen minutes.

PHARMACOLOGY AND THERAPEUTICS.

(19) The Excretion of Morphine from the Body.

In the *Archiv. für expt. Pathologie*, Tauber contributes a long paper dealing with the fate of morphine in the body. The subject has long been a vexed one, the literature dealing with it is very large, and, until quite recently, the results have been very conflicting. Morphine was chiefly sought for in the urine, but many investigators failed to find it there, while others got only a trace, and hence the prevailing idea has been that it was partly excreted in the urine, but chiefly became oxidised in the body. Marmé stated that it was partly excreted as morphine and partly converted into oxydimorphine. Although it had been incidentally stated by various observers that morphine was excreted into the bowel after subcutaneous injection, Leineweber in 1883 first showed that this was always the case, and in 1889 Alt found in dogs that two minutes and a half after its subcutaneous injection morphine could be got from stomach washings. He attributes the nausea and tendency to diarrhœa after hypodermic administration of morphine to this method of excretion. To ascertain whether morphine became altered in the blood or viscera, Tauber added a solution of the alkaloid to blood, and circulated the mixture through the livers and kidneys of recently slaughtered pigs. This method has already given reliable results with other substances. He found, however, that the morphine could be recovered entirely unaltered, and hence he concluded that the alkaloid suffers no change in the body, and is, therefore, excreted unchanged. The most probable method of excretion is by the bowel, and this he proceeded to prove by giving a dog frequent hypodermic injections of morphine in small doses. From the animal's fæces he recovered 41.3 per cent. of the ingested morphine. Allowing for unavoidable loss and for what is excreted in the urine, it is evident that the greater part of morphine which is given hypodermically becomes excreted into the intestinal canal. The importance of this from a medico-legal standpoint needs no comment.

(20) Treatment of Gonorrhœal Rheumatism.

Dr. Rubenstein, of Berlin (*Therap. Monatshefte*), recommends iodide of potassium as a certain and speedy remedy in cases of acute and chronic gonorrhœal rheumatism. He gives it in doses of 5 to 8 grains four to seven times daily, according to the urgency of the case. This treatment is continued for two or three days, but often in a few hours great

relief is experienced. The fever, pain, and swelling all diminish rapidly. In addition, rest in bed, carbolic lotion poultices, and in chronic cases blue ointment locally, are used. After the acute symptoms have subsided, elastic bandages, massage, and spa treatment are recommended. Gonorrhœa, if present, is to be treated in the ordinary way. Rubenstein supposes that the iodine acts as an internal antiseptic. A number of cases are given.

---

(20) Salipyrin.

PROFESSOR GUTMANN (*Deutsche med. Wochenschrift*), gives an account of a series of experiments which he has made with salipyrin in the Moabit Hospital, Berlin. Salipyrin is a combination of 57.7 parts of salicylic acid and 42.3 parts of antipyrin—$C_{19}H_{18}N_2O_4$. It is a white powder without smell, of slightly acidular taste, easily dissolved in alcohol, but not in water. Professor Gutmann's therapeutic experiments gave the following results: 1. Salipyrin lowers the temperature in fever. In cases of high continuous fever a first dose of two grammes, and four succeeding 1-gramme doses at intervals of an hour, proved most successful, and reduced the temperature by about 1½° to 2° C. The lowest temperature is reached in about three to four hours, then a rise follows, until nearly the original height is reached in four to five hours. Perspiration, more or less profuse, usually accompanies the fall of temperature. In common with all other antifebrile remedies salipyrin has a more powerful effect in cases of less resistent intermittent fevers. 2. Salipyrin is as beneficial in cases of acute rheumatic fever as salicylic acid (and its preparations) and antipyrin; but it is equally inefficient in preventing relapse. The quantity prescribed *pro die* was usually 6 grammes, distributed over six doses given every two hours. 3. Salipyrin is effective in cases of chronic rheumatism of the joints, and rheumatic sciatica. 4. Salipyrin was found to have no disagreeable secondary effects, even where patients took 6 grammes daily for a fortnight or longer. In one case only an eruption over the whole body was observed, which disappeared after three or four days. The colour of the urine is not affected by salipyrin. Taking the results of his experiments together (which experiments extended over more than 2,000 grammes) Professor Gutmann comes to conclusions that can scarcely be called highly encouraging. He finds that salipyrin may be used for the same therapeutic purposes as antipyrin and salicylic acid, but that where an antifebrile effect is intended the dose of salipyrin must be double that of antipyrin.

---

(22) Use of Alkalies in Dyspepsia.

GERMAIN SÉE, in an article published in the *Semaine Médicale*, says that alkalies frequently fail to do good in dyspepsia, owing to improper methods of administration. He recommends that 45 to 60 grains sodium bicarbonate, dissolved in warm water, be given at the time of the greatest acidity, which is generally two or three hours after meals. Smaller doses do not sufficiently neutralise the acid, while larger ones may do harm by leaving the stomach contents alkaline, the object being to keep the gastric juice at its normal acidity. In dyspepsia, with insufficient secretion of hydrochloric acid, such as is met with in anæmia and neurasthenia, alkalies in small doses should be given half an hour before meals. It has been experimentally shown that this increases the amount of acid secreted. General hygienic and dietetic treatment should not be neglected.

(23) Action of Caffeine on the Circulation.

PROFESSOR REICHERT, of Philadelphia, as the result of a number of experiments on dogs, concludes that caffeine diminishes the heart's efficiency for work, arrests it in diastole, sometimes induces sudden paralysis, and is, therefore, a cardiac depressant. In his paper published in the *Therapeutic Gazette* he also states his opinion that the alleged stimulant action upon the circulation is subjective, and dependent upon an excitation of the cerebral centres. The pulse rate is generally, although not always, increased; arterial pressure is usually at first unaffected or diminished, but occasionally a trifling increase is noted, while subsequently it is always diminished. Germain Sée, on the other hand, in a recent communication, holds that caffeine is a much more active stimulant to the heart and circulation than is generally supposed. Whichever of these views be correct, it is now certain from the researches of v. Schroeder and of Munk that the diuretic action of caffeine is due to direct stimulation of the renal epithelium, and occurs independently of any rise of blood pressure.

---

(24) Decomposition of Chloroform in Gaslight.

IT has long been known that the administration of chloroform in gaslighted rooms causes decomposition of the chloroform vapour, and that the persons present suffer from irritation of the respiratory passages, with coughing, sneezing, and lachrymation. Professor Kunkel (*Therap. Monatshefte*) introduced chloroform vapour into a glass chamber in which a gas was burning, and then drew off the products and analysed them. As a result, he found that the chloroform was chiefly decomposed into hydrochloric and carbonic acids, a small quantity of free chlorine being also present. As one-tenth per 1,000 of hydrochloric acid in air is sufficient to cause severe respiratory irritation, it is evident that this amount can be produced by comparatively little chloroform. Kunkel explains that irritating effects are comparatively infrequent, owing to the moisture in the air absorbing the free hydrochloric acid, and combining with it. Cloths or sheets dipped in a solution of washing soda, and hung up in the operating room, will absorb any hydrochloric acid or chlorine, and thus obviate their unpleasant effects.

---

(25) Strophanthus Seeds.

PREPARATIONS made from strophanthus seeds have been found to differ so much in therapeutic action, some even being almost inert, that many physicians have discontinued the use of the drug. No doubt the want of uniformity has largely arisen from the varying quality and botanical source of the seeds used, a subject to which Mr. E. M. Holmes rightly called the attention of the British Pharmaceutical Conference at Leeds. In his paper he pointed out that specimens presented to the Pharmaceutical Society's Museum of the seeds with which Professor Fraser made his physiological experiments are hairy, and of a greenish-fawn colour, with an average length of 0.6 to 0.7 inch, and weighing from 0.4 to 0.6 grain. They were imported from East Africa, and differ both in size and colour from those obtained from the typical *S. hispidus* of the west coast of Africa. The East African plant was described some years ago by Professor Oliver under the name of *S. Kombé*, but some uncertainty now exists as to whether it may not be a geographical variety of *S. hispidus*, and the name *S. hispidus*, variety Kombé, has been suggested. Consequently the medicinal action of the West African seed may or may not differ from that of those used by Professor Fraser; but

at any rate one factor contributing to the variability of the preparations of strophanthus may be eliminated by refusing to employ West African seeds until they have been proved to be physiologically identical with those of East Africa. Mr. Holmes further advises the rejection of all unripe and imperfectly-dried seeds, as well as the careful elimination of any non-hairy specimens. This caution is necessitated by the occasional admixture in the commercial products of a glabrous variety of strophanthus, provisionally named *S. glabrus*, from which ouabaïn is obtained, and also of the glabrous seeds of *Kickxia Africana*, a plant belonging to another genus.

BACTERIOLOGY.

(20) A Parasitic Protozoa-like Organism occurring in Carcinoma.

DR. NILS SJÖBRING (*Fortschritte der Medicin*, July 15th, 1890), reports that in a case of typical cancer of the mamma, hardened in alcohol, embedded in paraffin and stained with hæmatoxylin and eosine he observed, in the large epithelial cells, peculiar rounded bodies of various sizes, stained much more deeply than the surrounding cell substance; usually in the neighbourhood of the nuclei and lying in a kind of vesicle, and not directly in contact with the cell substance. Some of these bodies were small, 2μ, fiery red in colour, and without any differentiation; others were larger, as much as 15μ, in diameter, somewhat granular, and having a dark rose colour. These bodies, sarcodes, or psorosperms, found not only in the protoplasm of the cell but also in the nucleus, making their way into these structures in the above order, appear to increase in size. When they remain in the cell at the expense of which they grow they gradually take up and set free chromatin, destroy the protoplasm, and absorb the nucleus of the cell. Sometimes they wander outside the cells and appear to grow at the expense of the other tissues of the tumour. Small vacuoles appear in the sarcode, these increasing in number, and eventually form twenty or thirty spores. At this stage a membrane is differentiated from the general sarcode substance, and chromatin, apparently derived from the nucleus, may be seen within and outside the membrane. The chromatin gradually disappears, the spores and the membrane become more marked, and eventually well-developed sporocysts appear to take the place of the tumour cell. Within the spores contained in the sporocysts, elongated, thickened, highly-refractile crescentic "germs" are seen, but as the spores and the sporocysts become more fully developed, these "germs" also become more fully developed, and appear ultimately to form new sarcodes. Sometimes the sarcodes may be observed in the lymph spaces and lymph channels of the tumour. They are most distinctively stained with hæmatoxylin, and from the absence of a nucleus and from their other characters the author concludes that they are to be looked upon as sporozoa, similar to the coccidia met with in *pébrine* or silkworm disease. They were found by the author in six out of seven cases of cancer of the breast, but he was not so successful in his search for the organism in cancer in other positions. He considers that from the nature of the organism, cultivation experiments are not likely to be successful. In addition to a reference to Paget's observations, the following list of authors is given: Butchli, *Protozoa*, Leipzig, 1882; Balbiani, *Leçons sur les Sporozoaires*, Paris, 1884; Pfeiffer, *Zeitschrift f. Hygiene*, iv, 423; Salomonsen, *Sporozoën som sygdomsaarsug hos menuskecl, en foselaesning*, Kjobenhavn, 1890; Gubler, quoted by Davaine, *Traité des Entozoaires*, Paris, 1868; Leuckart, *Die Parasiten des Menschen*, 2 Aufl., 1879 86; Klebs, *Die allgemeine Pathologie*, I Theil, Jena, 1887; Podwyssozski, Ueber die Bedeutung der Coccidien in der Pathologie der Leber des Menschen, *Centralblatt f. Bakt. u. Paras.*, Bd. vi, 2; Steinhaus, Karyophagus Salamandræ, Eine in den Darmepithelkernen, etc., *Virch. Arch.* Bd. cxv, Heft i; Kjellberg, Virchow, Helminthologische Notizen, *Virchow's Archiv*, xviii, S. 506; Eimer, *Ueber die Ei-oder kugelförmigen sog. Psorospermien der Wirbelthiere*, Würzburg, 1870; Pitres, Sur une psorospermie trouvée dans une tumeur pleuritique, *Journal de Micrographie*, 1884; Lindemann, quoted by Perls-Neelsen, *Allgemeine Pathologie*, Stuttgart, 1886, S. 467; Retzius, Om Mulluscum contagiosum, *Nord. Med. Ark.*, 1870, ii; Neisser, Ueber das Epithelioma (sive Molluscum) contagiosum, *Vierteljahrsschrift f. Derm. u. Syph.*, 1888 S. 553; Török, mentioned in *La Semaine Méd.*, 1889, p. 332; Darier, *La Semaine Méd.*, 1889, p. 101 *et* 125; Malassez, *Archives de Méd. Exp. et d'Anat. Path.*, Mars, 1890; Albarran, *La Semaine Méd*, 1889, S. 117; Wickham, Anatomie pathologique et nature de la maladie de Paget du Mamelon, *Archives de Médecine expériment. et d'Anat. Path.*, Jan, 1890; Thoma, Ueber eigenartige Organismen in den Epithelzellen der Carcinome, *Fortschritte der Med*, 1889, Nr. ii. For micro-organisms described in cancer, see: Scheuerlen, Die Aetiologie des Carcinoms, *Deutsche med. Wochenschrift*, 1887, 48; Verneuil, Propriétés pathogènes des microbes renfermés dans les tumeurs malignes, *Revue de Chir*, ix, 100; Koubasoff, Die Mikroörganismen der krebsartigen Neubildungen, *Westnii Higienii*, 1889 (referred to in *Central. f. Bakt. und Paras*).

(21) Action of the Blood on Bacteria.

PROFESSOR BONOME (*Centralb. f. Bakt. u Parasitenk.*, Bd. iii, Nos. 7, 8, and 15, August, 1890, pp. 199 and 234) records the results of his researches on the following points: Whether physiological alterations in the blood play any part in modifying its destructive action on bacteria; whether it is possible to produce alterations in the composition of the blood of such a nature that the normal inimical action against bacteria may be altered; and whether it is possible to derive any reliable data that will throw light on the subject of immunity. As a result of his experiments he comes to the conclusion that staphylococci introduced directly into the blood are destroyed in from ten to twenty-five minutes; more rapidly in the blood of young rabbits than in older animals of the same species. He then, by injecting the poison obtained from the pus of an old empyema or a chronic abscess (by means of a Pasteur-Chamberland filter) in small quantities into healthy rabbits, proved that the bacteria-destroying activity of the blood is increased, the organisms used being staphylococcus aureus, albus, and citreus. He holds, however, that the introduction of such poison does not appear to exert any influence upon the similar activity of the fixed tissues. Poison from acute pus obtained in a similar manner appears to exert not the slightest influence on the destructive action of the blood, whilst, owing to its effect upon the tissue elements it diminishes their power of destroying such organisms as the staphylococci above mentioned. Similar poison from pyogenic staphylococcus cultures does not increase this destructive power of the blood against the above mentioned organisms, and any immunity that is produced depends not on the rapidity and certainty with which the blood destroys the organisms introduced into its stream, but rather upon a greater resistance which the tissue elements exert against the bacteria

poison, when they have become accustomed to the action of the poison by remaining in contact with the metabolic products of the same bacteria. He also gives experiments to show that water injected into the veins can diminish this destructive activity of the blood to a certain extent, but never completely; for, although the animals so injected and control animals died about the same time, those in which water had been injected usually showed small purulent deposits in the kidneys and myocardium, and more or less fatty degeneration of the epithelium of the kidneys, so that he considers that, in addition to this slight diminution in the destructive activity of the blood, there is some alteration of the protoplasm of the cells, probably due to the absence of salts and the cutting off of the full oxygen supply by the presence of water, by which their resistance is considerably diminished in certain areas, and owing to which they are more readily attacked by the injected staphylococci.

(28) Examination of the Sputum for Tubercle Bacilli.

DR. H. KÜHNE, of Wiesbaden (*Centralbl. fur Bakt. und Parasitenk.*, viii Band, No. 10, August 29th, 1890), after referring to the fallacies and difficulties with which the search for tubercle bacilli in sputum from phthisical patients is surrounded, describes a new method of staining the bacilli. When it is difficult to spread out the sputum on a cover glass he uses a concentrated solution of borax, to which at least an equal quantity of sputum is added. The mixture is shaken up in a suitable glass or is worked up in a mortar, after which it is easily spread in a thin layer over the cover glass. Nummular sputa from cavities may be broken down by a watery solution of carbonate of ammonia; this has the advantage that it is partially volatilised as soon as the cover glass is heated, and what remains is broken up by the action of the acid. An equable layer on the cover glass being obtained, the albumen is coagulated by careful heating over a flame, after which the specimen is stained in Ziehl's fuchsin solution for five minutes, the colour is completely removed with a 30 per cent. solution of nitric or sulphuric acid, and the specimens are washed in water and dried. In order to obtain a contrast stain, two or three drops of a concentrated solution of picric acid in aniline oil may be added to a watch glass containing pure aniline oil; a drop of this, placed on the slide before the cover glass is lowered into position, gives a sufficient yellow contrast stain to cause the red tubercle bacilli to stand out very prominently. They may be examined with a magnifying power of × 60 to × 100, and where they are in great number, as is the rule in "cavernous" sputa, they appear under still weaker magnifying power as particles of red dust on a yellow ground. To make a permanent preparation, Kühne recommends that the aniline oil be driven off by means of his hand blower and that the specimen be mounted in Canada balsam. By this method the tubercle bacilli only are stained.

DERMATOLOGY.

(29) Urticaria of the Tongue.

DR. BOCK (*Monats. f. prakt. Derm.*, vol. xi, No. 4) states that he was called to a man, aged 38, who presented an appearance of slight asphyxia, and who breathed with great difficulty. The swollen tongue filled the whole of the mouth, and could scarcely be protruded. The colour was bluish and shining, and the papillæ had disappeared. The consistence of the tongue was hard and elastic. There was no abnormal heat, nor pain, nor burning. The affection had appeared suddenly and spontaneously. For some years the patient had suffered from frequent attacks of urticaria, which either occurred without cause or as the result of eating shellfish. The author prescribed a hot mustard footbath, and injected subcutaneously half a milligramme of atropine. After two hours the breathing became easier, and in the course of the day the swelling of the tongue disappeared.

(30) Folliculitis Parasitaria Tonsurans of the Scalp.

NIMIER (*Gazette Hebd. de Méd. et de Chirurg.*, 20. 1890) states that in a Paris regiment he saw cases of the affection which Lailler has designated *Pelade pseudotondante*, and which Besnier has described under the name *Pelade à cheveux fragiles*. The diameter of the round or oval patches of alopecia was 2 centimètres to 4 centimètres. They were scattered irregularly on the top of the head. On the affected part black stumps or very short broken hairs were observed. The development of the disease was quickly completed, the time not exceeding eight to ten days. Perfect cure was effected in from two to four months. The new growth of hair was normal. Five out of fourteen patients had been in prison, and the author suggests that the prison clothing may have been the means of conveying the contagion.

(31) Arsenical Melanosis.

PROFESSOR WYSS (*Correspondenzblatt f. Schweizer Aerzte*, 1890, No. 15) relates the cases of a girl of 12 and a boy of 10, who were treated for chorea with 1:2 Fowler's solution. After a daily dose of 45 drops of the solution had been reached, a general, dirty-brown pigmentation appeared over the whole body. This disappeared on discontinuing the arsenic, but it recurred again in the case of the girl when the arsenical course was resumed. Portions from the skin of one of these patients and from another case were examined microscopically. In earlier cases the granular colouring matter was deposited in the lymph channels in the papillæ, and to a less extent in the cutis. In older cases, on the other hand, the deposit took place in thick clusters in the widened plexuses of the lymph vessels of the cutis. Attempts were made to ascertain the condition of the cutis, but no positive results were obtained. Professor Wyss is of opinion that a considerable decrease in the number of blood corpuscles and in the amount of hæmoglobin occurs after the use of arsenic; that arsenic, when absorbed in sufficient quantity, disturbs a great number of blood corpuscles, and partly displaces the hæmoglobin, and the decomposed blood pigment reaches the lymph channels of the skin in an insoluble granular form, where, if the deposit be sufficient, it produces arsenical melanosis.

(32) Leprotic Skin.

DR. MONTGOMERY (*Occid. Med. Times*, June, 1890; *Monats. f. prakt. Derm.*, vol. xi, No. 3) states that Dr. Swift excised a piece of skin from the forearm of Keanu at the part where the lepra virus had been inoculated. It was placed in alcohol and sent to the author for microscopical examination. The layers of the skin were studded, in some parts very thickly, with lepra bacilli. These were found scattered through the tissue, as also in groups in the so-called "lepra cells." He remarks that, in the excised portion, as in tubercular leprosy generally, the mere presence of numerous lepra bacilli in the skin does not necessarily lead to considerable disturbances of the nutrition of the tissue. Granulation tissue was found in only one part, and was small in extent.

Printed and published by the British Medical Association at their Office, No. 429, Strand, in the Parish of St. Martin-in-the-Fields, in the County of Middlesex.